Skolkovo Energy Lecture

Burning our Bridges:

The Rise and Fall of Long-term Gas Contracts

Simon Blakey
SAB Global Energy

Skolkovo
19th April 2017

Long-term Gas Contracts

The business dimension

The political dimension

The changed European gas market

Long-term gas contracts: the future

What does a long-term contract look like?

- The formal name for long-term gas contract is usually a ‘Sale and Purchase Agreement’ (an SPA)
- It will typically have about 20 to 25 clauses
  - Many deal with formal matters – definitions, confidentiality, simple matters of logistics, such as where and how the parties must contact each other, what law is applicable etc.
- Key clauses – the heart of the deal – are:
  - Price, including price formula
  - Quantities, including Min, Max and Ave ACQ and DCQ
  - The terms under which renegotiation can take place

What does an oil-linked price look like?

- Buyer and seller agree two things:
  - A base price, "P_0"
  - Indexation terms

- A simple formula will look like this:

$$P_n = P_0 (0.40\ FO/FO_0 + 0.45\ FO_1/FO_{10} + 0.15\ (GO/GO_0)$$

- Or a more complex one:

$$P_n = P_0 + 0.35 \times 0.82 \times 0.007595\ (G - G_0) + 0.40 \times 0.90 \times 0.007825\ (F - F_0) + 0.25 \times \{(0.99^{m/12}) \times I/I_0\}$$

The business dimension

Key Principles of Long-term Gas Contracts

Contract for
The
Sale and
Purchase of
Natural Gas

This matters to us both!

Non-manipulation of price

This matters to me, the buyer!

Price competes in final market

Investment recovery/protection

This matters to me, the seller!

Investment recovery/investor protection

- Counterparty volume assurance provides security for investors and comfort to lenders
- Deep and liquid spot markets can play similar role
- Gas producers and suppliers take price risk whether selling on indexed or hub basis
- **<u>But</u>**, with spot markets, more equity commitment may be needed for upstream project investment

Market competitiveness of the product

- Gas should be marketable in the market of the buyer

- Allocation of volume versus price risks

- … but note … a world of competing suppliers with a pan-European customer base differs from a world of adjacent monopolies … and a spot market for gas tells final customers exactly what they ought to be paying

Non-manipulation of price

- Historic reasons for oil price linkage:
  - opportunity cost of product
  - assuring market penetration
  - upstream value for producers
  - ability to hedge in liquid markets

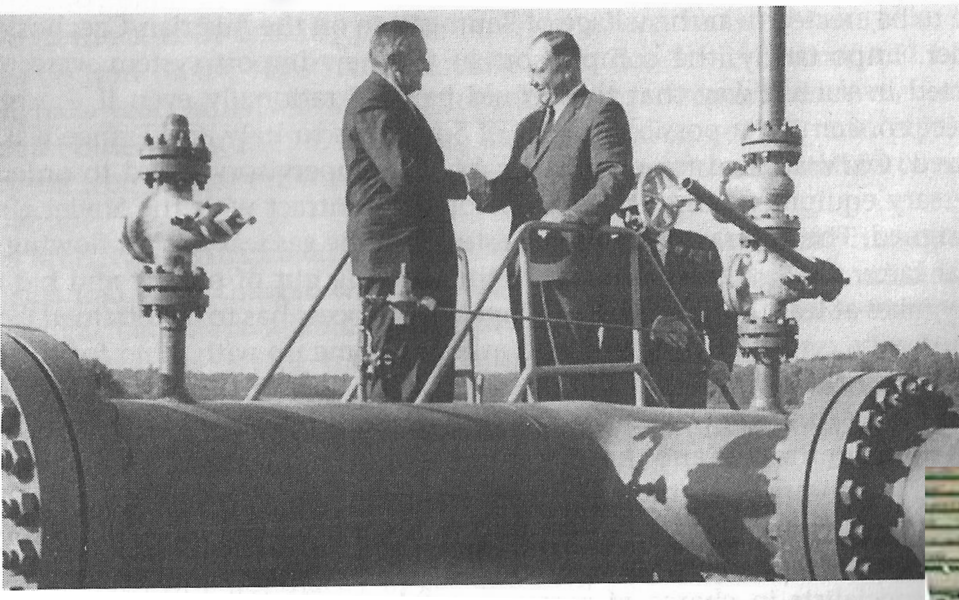
    … ***but also***

- … Outside the control of the parties or of their governments

- Also the virtue of gas-to-gas competition in a *liquid* spot market

The political dimension

The politics have never been easy: 1968



1 September 1968 — the first gas crosses an East-West border, just 40 km from Bratislava …

Weiss and Kortunov shake hands

Ten days earlier
… in Bratislava and Prague

‘Infrastructure Cooperation’

- Renewed dialogue began in 1969:
  - France and USSR appointed government representatives to look at gas trade prospects
  - ENI-Soviet working group established
  - Warsaw Pact issued Budapest Appeal for peace and security: “infrastructure projects … can and must become foundation of European cooperation”
- Brandt (German Foreign Minister) saw talks about gas as an alternative to difficult subjects (GDR recognition, Polish-German border)—birth of *Ostpolitik*
- Schiller (German Economics Minister) and Patolichev (Soviet Foreign Trade Minister) agreed principle of Soviet-German pipeline

Fifteen years later – times were even tougher

Pershing II and GLCMs

RSD-10 Pioneers (SS20s)

Political controversy and the 1980s contracts

- The 1979 oil crisis prompted new European interest in importing more gas from the USSR
  - The negotiators now knew each other well
  - Trust had been established over ten years of supply
- The US government strongly opposed this:
  - Soviet invasion of Afghanistan
  - Rise of Solidarity in Poland
- US embargo on supply of compressor parts
- European resistance to US pressure—gas contracts confirmed as a route to dialogue, an east-west bridge

The changed European gas market

Rise of the traded (spot) markets

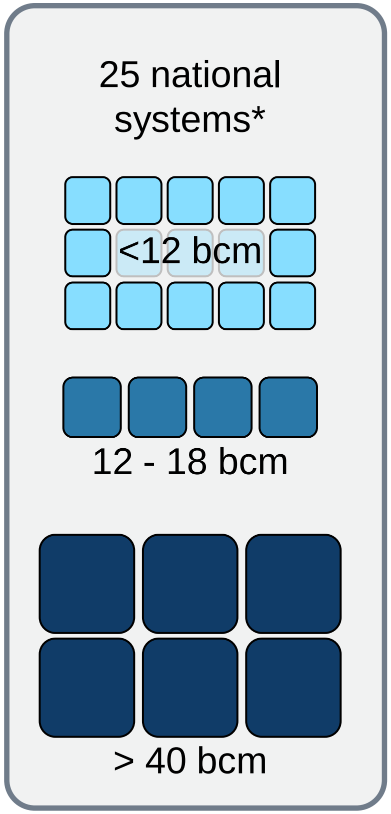
- First developed in UK as part of wider economic transformation in 1980s/1990s
  - Creating marketplaces on networks
  - ‘Network Code’ for use of system, and independence of system from users (shippers)

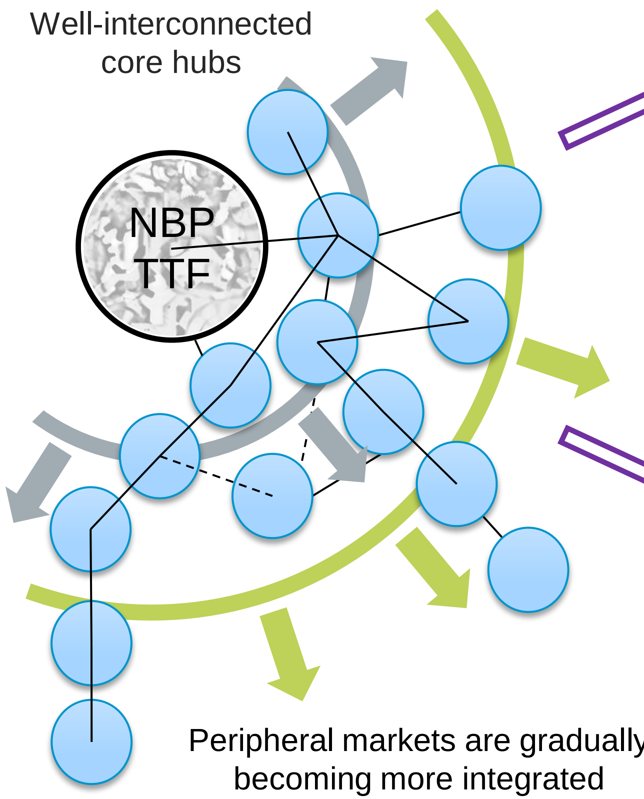
- Exported to continental Europe through physical interconnection and EU processes

- In principle, does it end the need for long-term contracts?

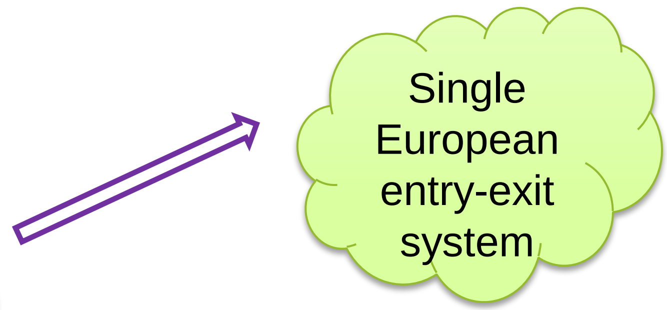
Connections among Trading Hubs

MARKET STRUCTURE TODAY



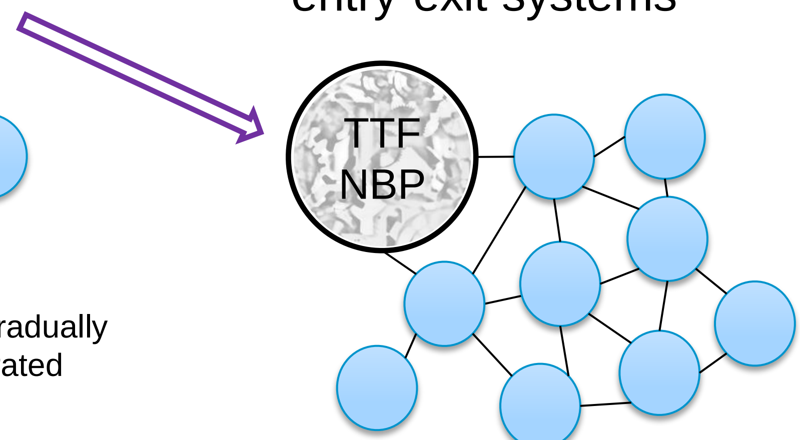


GAS TARGET MODEL

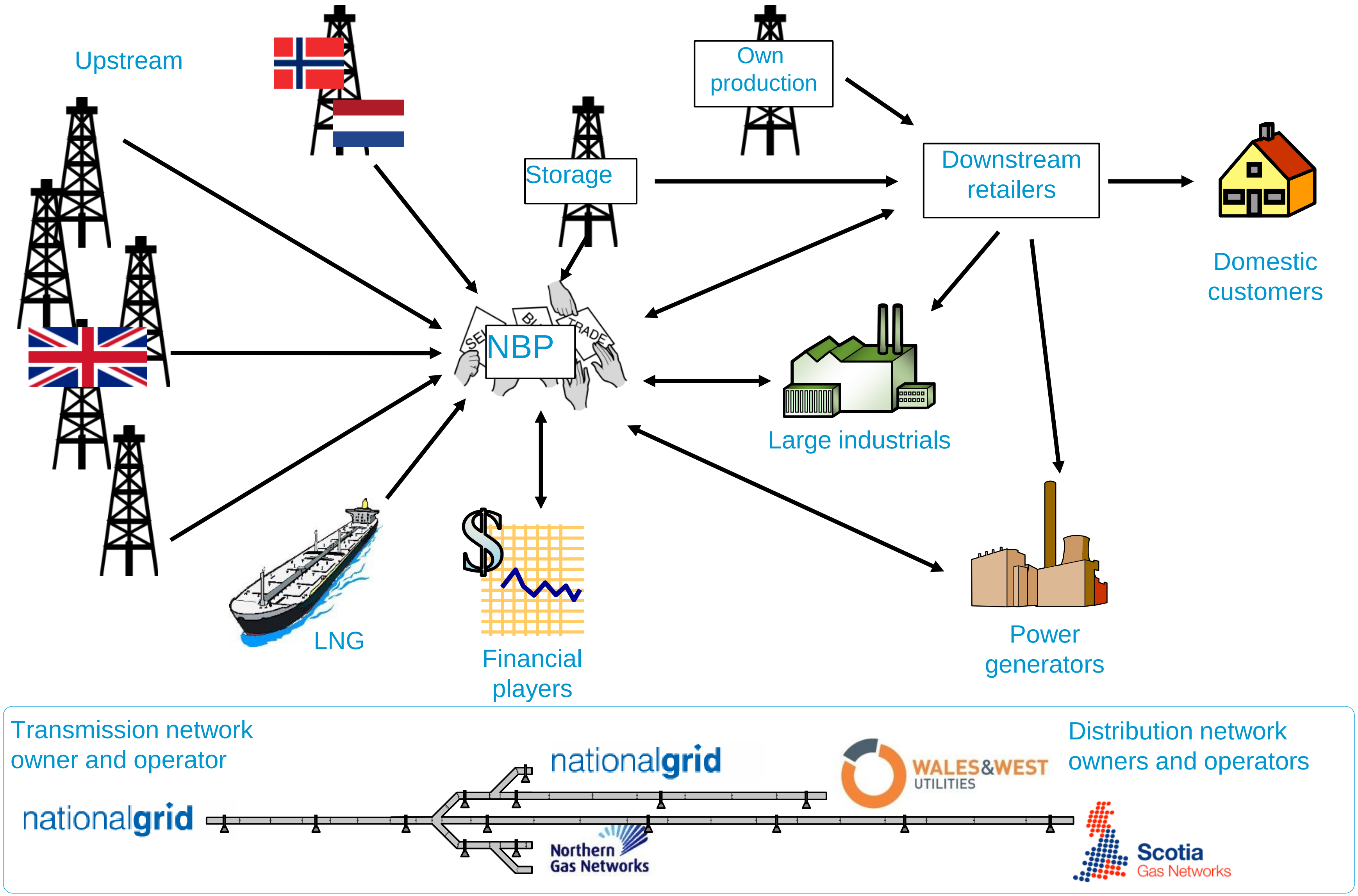


LIKELY STRUCTURE

n **consolidated entry-exit systems**



Who buys and sells at hubs? The UK example



Long-term gas contracts: the future

Concerns about spot markets

- Lack of liquidity – possibility of manipulation
- Limited hedging opportunities – price risk
- Price volatility – versus price averaging
- These concerns are small compared with costs for a gas buyer of a formula LTC price being out of line with spot price at which his customers can buy gas

Redesigning long-term contracts

- Goals:
  - Independence of price manipulation
  - Guaranteed volume offtake for seller
  - Buyer has to be able to respond to unpredictable market conditions
- Enhanced flexibility terms
- Price limits – relating volume offers to market prices
- Agreeing how to deal with transmission tariff payments